REQUEST FOR RECONSIDERATION

Claims 1 to 21 as presented with applicants' paper dated April 09, 2007, are currently pending in this case. Claims 9 and 17 stand allowed, Claims 6 to 8, 15 and 16 stand objected to, and Claims 1 to 5, 10 to 14 and 18 to 21 stand rejected.

More specifically, the Examiner reiterated the rejection of Claims 1 to 5, 10 to 14 and 18 to 21 under 35 U.S.C. §103(a) as being unpatentable in light of the teaching of ***Seitz et al.*** (**WO 96/17825**). The Examiner argued *inter alia*:[1] "*Seitz suggests a compound of formula I where Ar2 is a phenyl that is substituted with 2 alkoxy groups, A1, A2 and A3 = H, m = 2, E is =CHR1 where the position 1 on the moiety bares [sic] alkyl (Me, Et, Pr), G = bond, and Z = halogen, alkyl (Me, Et, Pr) or alkoxy (O-Me, O-Et, O-Pr). The substitution on the heteroaryl can be halogen, alkyl, etc. This compound taught by Seitz is equivalent to compound of instant formula I in the instant claims.*"

For the following reasons, and the reasons already presented in applicants' previous paper,[2] applicants respectfully disagree with the Examiner's position that the particular genus of compounds which was delineated by the Examiner is taught or even suggested, i.e. rendered prima facie obvious, by the reference.

"*In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification.*"[3] The motivation to make the proposed substitution, combination, or other modification of the prior art must flow from some teaching in the art that suggests *the desirability or incentive* to make the combination which is needed to arrive at the claimed invention,[4] the strongest rationale for combining prior art elements in the manner needed being a recognition, expressly or impliedly in the prior art or drawn from a convincing line of

---

1) Final Office action page 2, lines 12 to 18.

2) Cf. applicants' paper dated April 09, 2007, which is herein incorporated by reference.

3) *In re Lintner*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

4) Cf. *In re Napier*, 55 F.3d, 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995): "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination."; *In re Geiger*, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987); *In re Laskowski*, 871 F.2d 115, 117, 10 USPQ2d 1397, 1399 (Fed. Cir. 1989): "[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification", quoting *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)

reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination.[5]

The patentability of a claim to a specific compound or subgenus which is embraced by a prior art genus should be analyzed no differently than any other claim for purposes of 35 U.S.C. 103. *"The section 103 requirement of unobviousness is no different in chemical cases than with respect to other categories of patentable inventions."*[6] In particular, the fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a prima facie case of obviousness.[7] Again, the motivation to make the proposed combination of prior art elements must flow from some teaching in the art that suggests the desirability or incentive to make the combination which is needed to arrive at the claimed invention,[4] the strongest rationale for doing so being a recognition that some advantage or expected beneficial result would have been produced by their combination.[5]

It is respectfully urged that the teaching of ***Seitz et al.***, when taken as a whole, fails to suggest that some advantage or expected beneficial result would be produced when making the particular combination of elements which is necessary to arrive at applicants' formula (I).

At the least, the teaching of ***Seitz et al.*** cannot be deemed sufficient for one of ordinary skill in the art having the reference before him to make the combination which is necessary for the grouping $-Ar^1-G-Z$ of the prior art formula to resemble the optionally fused 5- or 6-membered heteroaromatic ring which optionally carries up to three substituents selected from halogen, C_1-C_4-alkyl, C_1-C_4-haloalkoxy, C_1-C_4-haloalkyl and C_1-C_4-alkoxy which is represented by "Het" in applicants' formula (I).

A person having ordinary skill in the pertinent art who considered the teaching of ***Seitz et al.*** as a whole, would have been fully aware of the distinction between (a broad variety of) optional substituents of Ar^1 and the mandatory moiety $-G-Z$ which particularly represents radicals in which G is taken by bridging groups such as oxygen and sulfur, or certain optionally substituted dimethylene (ethane-1,2-diyl) and ethene-1,2-diyl groups, or a group such as $-CQ-Q-$, $-CH_2-Q-$; $-Q-CH_2-$, $-CQ-Q-CH_2-$, $-Q-CQ-Q-CH_2-$, $-N=N-$, $-S(O)_n-CH_2-$, $-C(R^7)=N-O-$, $-C(R^7)=N-O-CH_2-$, $-N(R^8)-CQ-$, $-Q-CQ-N(R^8)-$, $-N=C(R^7)-Q-CH_2-$, $-CH_2-O-N=C(R^7)-$,

5) *In re Sernaker*, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983).

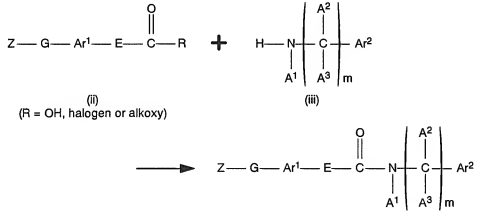
6) *In re Papesch*, 315 F.2d 381, 385, 137 USPQ 43, 47 (CCPA 1963).

7) *In re Baird*, 16 F.3d 380, 382, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994) ("The fact that a claimed compound may be encompassed by a disclosed generic formula does not by itself render that compound obvious."). See also *In re Jones*, 958 F.2d 347, 350, 21 USPQ2d 1941, 1943 (Fed. Cir. 1992); *In re Deuel*, 51 F.3d 1552, 1559, 34 USPQ2d 1210, 1215 (Fed. Cir. 1995).

-N(R^8)-CQ-Q-, -CQ-N(R^8)-CQ-Q-, -N(R^8)-CQ-Q-CH_2-, -Q-C(R^7)=N-O- or -N(R^8-c(R^7)=N-O-CH_2-, and Z in turn represents certain optionally substituted aromatic radicals.

The respective combination of a certain bridge -G- and an aromatic radical -Z as a bridgehead which is suggested by the reference is not only illustrated in the particular, the preferred, and the illustrative embodiments. The respective combination is equally found in the art which ***Seitz et al.*** reflect at the outset of their disclosure, namely EP 398 692, EP 468 775, DE 40 30 038 (*also published as* EP 477 631), and WO 92/13830. Applicants herewith enclose copies of the cover pages of the respective background art of ***Seitz et al.***'s teaching for the Examiner's convenience. It is immediately apparent from the abstracts which are set forth on the respective cover pages that all of the background art compounds comprise a phenyl ring (*corresponding to Ar^1 of Seitz et al.'s formula (1)*), which carries a certain moiety which corresponds to the group -G-Z of ***Seitz et al.***'s formula (1). The respective grouping is generally indicated to be in ortho-position to a radical corresponding to -E- of ***Seitz et al.***'s formula. Notably, the majority of the references also indicate that the phenyl ring optionally carries additional, more conventional substituents.

Correspondingly, ***Seitz et al.*** mention various background art references in the section addressing the manufacture of their compounds (1). The compounds (1) are obtained according to ***Seitz et al.*** by reacting a carboxylic acid derivative with an amine, designated herein as (ii) and (iii), respectively:[8]



The starting materials (ii) are stated to be known and/or obtainable in accordance with known procedures, and ***Seitz et al.*** specifically refer in this context to EP 178 826, EP 242 081, EP 382 375, EP 493 711, EP 432 503 and DE 39 38 054.[9] For the Examiner's convenience, applicants have also enclosed herewith copies of the cover sheets of these documents. The respective com-

8) E.g. page 4, indicated lines 1 to 9, and page 24, indicated line 23 et seq., of ***WO 96/17825***.

9) Cf. page 24, indicated lines 31 to 33, of ***WO 96/17825***.

pounds are built up similar to the compounds which are mentioned in the art referenced at the outset of ***Seitz et al.***'s teaching. Again, the majority of the abstracts which are set forth on the respective cover pages depict background art compounds which comprise a phenyl ring (*corresponding to Ar^1 of Seitz et al.'s formula (1)*), which carries a certain moiety which corresponds to the group -G-Z of ***Seitz et al.***'s formula (1). The respective grouping is generally indicated to be in ortho-position to a radical corresponding to -E- of ***Seitz et al.***'s formula. Again, the majority of the references also indicate that the phenyl ring may optionally carry additional, more conventional substituents.

A person having ordinary skill in the art to which the teaching of ***Seitz et al.*** pertains was, clearly, fully aware of the structural significance of the particular unit which corresponds to the group -G-Z of ***Seitz et al.*** Such a person was, therefore, directed by the reference to turn to a selection and combination of specifically those radicals mentioned in the definitions of -G- and Z of ***Seitz et al.***'s formula which yield the requisite structural particularities, e.g., the combination of a bridging moiety (*-G-*) with an aromatic ring as the bridgehead (*-Z*). In light of the significance of the particular structural unit, a person of ordinary skill in the art would not have been motivated to make a selection and combination of radicals which yield in a compound according to ***Seitz et al.***'s formula (1) which lacks the structural particularities of the -G-Z ortho-substituent.

The radicals which are allowed as substituents of the group "Het" of applicants' formula (I), namely halogen, C_1-C_4-alkyl, C_1-C_4-haloalkoxy, C_1-C_4-haloalkyl and C_1-C_4-alkoxy, clearly lack the structural particularities of the -G-Z ortho-substituent. As such, the situation here resembles the circumstances which were before the Federal Circuit in the decision in *In re Baird*[10] where a prior art reference disclosed a generic formula encompassing the claimed composition. The Court found that the reference did not provide the requisite motivation to select the claimed composition because the reference (a) disclosed a vast number of possibilities, and (b) gave as "preferred" and "optimum" examples which were different from and more complex than the claimed composition. In fact, the Court noted that the reference appeared to teach away from the selection of the claimed composition by focusing on the more complex examples.

Seitz et al. disclose a vast number of possibilities, in particular regarding the groups represented by -E-, -Ar^1-, -G-, and -Z, which allow for distinctly different structures of the moiety -E-Ar^1-G-Z of ***Seitz et al.***'s formula. Additionally, the reference indicates preferred and particularly preferred examples of the moiety -E-Ar^1-G-Z, all of which are different from, and structurally by far more complex than, the radicals which are allowed as substituents of the group "Het"

10) *In re Baird*, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994).

of applicants' formula (I), namely halogen, C_1-C_4-alkyl, C_1-C_4-haloalkoxy, C_1-C_4-haloalkyl and C_1-C_4-alkoxy. The teaching of ***Seitz et al.*** can, in light of the Court's holding in *In re Baird*, not be deemed to render applicants' compounds (I) prima facie obvious. In fact, under the respective holding of the Court, the teaching of ***Seitz et al.*** can be deemed to teach away from the selection of substituents such as halogen, C_1-C_4-alkyl, C_1-C_4-haloalkoxy, C_1-C_4-haloalkyl and C_1-C_4-alkoxy by focusing on the more complex examples.

In light of the foreegoing, applicants respectfully request that the Examiner withdraw the rejection of Claims 1 to 5, 10 to 14 and 18 to 21 under 35 U.S.C. §103(a) as being unpatentable in light of the teaching of ***Seitz et al.***

Moreover, the foregoing shows that the subject matter which is defined in applicants' claims is patentable under the pertinent provisions of the Patent Act. The application is therefore deemed to be in good condition for allowance. Favorable action by the Examiner is respectfully solicited.

However, in the event that the Examiner is of the opinion that further explanations or clarifications are necessary or desirable to expedite the proceedings in this matter, applicants would greatly appreciate it if the Examiner would grant their representative the opportunity address such matters in a personal interview.

(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Veröffentlichungsnummer: **0 477 631 A1**

(12) **EUROPÄISCHE PATENTANMELDUNG**

(21) Anmeldenummer: **91115145.4**

(51) Int. Cl.5: **C07C 251/48**, A01N 37/50

(22) Anmeldetag: **07.09.91**

(30) Priorität: **22.09.90 DE 4030038**

(43) Veröffentlichungstag der Anmeldung:
01.04.92 Patentblatt 92/14

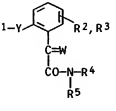
(84) Benannte Vertragsstaaten:
AT BE CH DE DK ES FR GB GR IT LI NL SE

(71) Anmelder: **BASF Aktiengesellschaft**
Carl-Bosch-Strasse 38
W-6700 Ludwigshafen(DE)

(72) Erfinder: **Brand, Siegbert, Dr.**
Eyersheimer Strasse 42
W-6701 Birkenheide(DE)
Erfinder: **Ammermann, Eberhard, Dr.**
Sachsenstrasse 3
W-6700 Ludwigshafen(DE)
Erfinder: **Lorenz, Gisela, Dr.**
Erlenweg 13
W-6730 Neustadt(DE)
Erfinder: **Sauter, Hubert, Dr.**
Neckarpromenade 20
W-6800 Mannheim 1(DE)
Erfinder: **Oberdorf, Klaus, Dr.**
Gartenstrasse 4
W-6904 Eppelheim(DE)
Erfinder: **Kardorff, Uwe, Dr.**
D 3,4
W-6800 Mannheim 1(DE)
Erfinder: **Kuenast, Christoph, Dr.**
Sailerstrasse 2
W-6701 Otterstadt(DE)

(54) **Ortho-substituierte Phenylessigsäureamide.**

(57) Ortho-substituierte Phenylessigsäureamide I



I

(R^1 = H, Alkyl, Cycloalkyl, Alkenyl, Alkinyl, Phenylalkinyl, Alkoxyalkyl, Alkoxycarbonyl, Phenyl, Phenylalkyl, Phenylalkenyl oder Phenoxyalkyl, 5-/6-gliedriger Heterocyclus mit 1-3 Heteroatomen, an den ein Benzolring oder ein 5-/6-gliedriger Heterocyclus anneliiert sein kann; R^2,R^3 = H, CN, Halogen, Alkyl, Alkoxy; R^4,R^5 = H, Alkyl und R^4 oder R^5 = Alkoxy; Y = O, S, SO, SO_2, N=N, O-CO, CO-O, CO-O-CH_2, Alkylen- oder Halogenalkylenkette, Alkenylenkette, Alkinylenkette, Oxyalkylenkette, Thioalkylenkette, Alkylenoxykette, Carbonylalkylen- oder Alkylencarbonylkette W = Alkoximinogruppe, Alkoxymethylengruppe, Alkylthiomethylengruppe),
ausgenommen Verbindungen, bei denen R^1 Wasserstoff, Phenyl oder 2,2-Dimethyl-3-(2',2'-dichlorvinyl)-cyclopropyl, R^2 bis R^5 Wasserstoff, Y Carbonyloxymethylen und W Methoxymethylen oder Methylthiomethylen bedeuten.

Die Verbindungen I eignen sich als Fungizide und zur Bekämpfung von Schädlingen.

EP 0 477 631 A1

Cited in WO 96/17825
10 192

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 5 :
C07C 251/60, A01N 37/50

A1

(11) International Publication Number: WO 92/13830

(43) International Publication Date: 20 August 1992 (20.08.92)

(21) International Application Number: PCT/GB92/00067

(22) International Filing Date: 13 January 1992 (13.01.92)

(30) Priority data:
9102038.8 30 January 1991 (30.01.91) GB
9117530.7 14 August 1991 (14.08.91) GB

(71) Applicant *(for all designated States except US)*: IMPERIAL CHEMICAL INDUSTRIES PLC [GB/GB]; Imperial Chemical House, Millbank, London SW1P 3JF (GB).

(72) Inventors; and

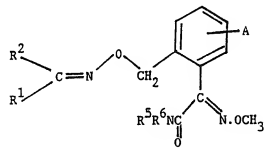
(75) Inventors/Applicants *(for US only)* : CLOUGH, John, Martin [GB/GB]; 7 Gypsy Lane, Marlow, Buckinghamshire SL7 3JT (GB). GODFREY, Christopher, Richard, Ayles [GB/GB]; 159 V king, Great Hollands, Bracknell, Berkshire RG12 8US (GB). DE FRAINE, Paul, John [GB/GB]; 5 Salisbury Close, Wokingham, Bershire RG11 4AJ (GB). MATTHEWS, Ian, Richard [GB/GB]; 9 Emm Close, Wokingham, Berkshire RG11 1HH (GB).

(74) Agent: HOUGHTON, Malcolm, John; Imperial Chemical Industries plc, Group Patents Services Department, P.O. Box 6, Bessemer Road, Welwyn Garden City, Herts AL7 1HD (GB).

(81) Designated States: AT (European patent), AU, BB, BE (European patent), BF (OAPI patent), BG, BJ (OAPI patent), BR, CA, CF (OAPI patent), CG (OAPI patent), CH (European patent), CI (OAPI patent), CM (OAPI patent), CS, DE (European patent), DK (European patent), ES (European patent), FI, FR (European patent), GA (OAPI patent), GB, GB (European patent), GN (OAPI patent), GR (European patent), HU, IT (European patent), JP, KP, KR, LK, LU (European patent), MC (European patent), MG, ML (OAPI patent), MN, MR (OAPI patent), MW, NL (European patent), NO, PL, RO, RU, SD, SE, SE (European patent), SN (OAPI patent), TD (OAPI patent), TG (OAPI patent), US.

Published
With international search report.

(54) Title: FUNGICIDES



(I)

(57) Abstract

Fungicidal compounds having formula (I) and stereoisomers thereof, wherein A is hydrogen, halo, hydroxy, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} haloalkyl, C_{1-4} haloalkoxy, C_{1-4} alkylcarbonyl, C_{1-4} alkoxycarbonyl, phenoxy, nitro or cyano; R^1 and R^2, which may be the same or different, are hydrogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted heterocyclylalkyl, optionally substituted cycloalkylalkyl, optionally substituted aralkyl, optionally substituted aryloxyalkyl, optionally substituted heterocyclyloxyalkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted alkoxy, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted aryloxy, optionally substituted heterocyclyloxy, nitro, halo, cyano, $-NR^3R^4$, $-CO_2R^3$, $-CONR^3R^4$, $-COR^3$, $-S(O)_nR^3$ wherein n is 0, 1 or 2, $(CH_2)_mPO(OR^3)_2$ wherein m is 0 or 1, or R^1 and R^2 join to form a carbocyclic or heterocyclic ring system; R^3 and R^4, which are the same or different, are hydrogen, optionally substituted alkyl, optionally substituted aralkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl or optionally substituted heteroaryl, or R^3 and R^4 join to form an optionally substituted heterocyclic ring; and R^5 and R^6 are independently hydrogen or C_{1-4} alkyl.

Cited in WO 96/17825
p. 9 #2

(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number : **0 468 775 A1**

(12) **EUROPEAN PATENT APPLICATION**

(21) Application number : **91306762.5**

(51) Int. Cl.[5] : **C07C 251/48**, A01N 37/50

(22) Date of filing : **24.07.91**

(30) Priority : **26.07.90 JP 200696/90**

(43) Date of publication of application :
29.01.92 Bulletin 92/05

(84) Designated Contracting States :
AT BE CH DE FR GB IT LI NL SE

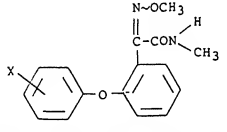
(71) Applicant : **SHIONOGI SEIYAKU KABUSHIKI KAISHA trading under the name of SHIONOGI & CO. LTD.**
1-8, Doshomachi 3-chome Chuo-ku
Osaka 541 (JP)

(72) Inventor : **Takase, Akira**
5-20-15, Oe
Otsu-shi, Shiga-ken (JP)
Inventor : **Kai, Hiroyuki**
603, Kodan 15 To, Takada-cho
Yamatokoriyama-shi, Nara-ken (JP)
Inventor : **Nishida, Kuniyoshi**
468, Shinjo, Minakuchi-cho
Koga-gun, Shiga-ken (JP)
Inventor : **Shinomoto, Shoji**
2-2-2-1122, Taijo
Matsubara-shi, Osaka-fu (JP)
Inventor : **Nagai, Masahiko**
4-4-8-608, Minamishinmachi, Kuise
Amagasaki-shi, Hyogo-ken (JP)

(74) Representative : **Hardisty, David Robert et al**
BOULT, WADE & TENNANT 27 Furnival Street
London EC4A 1PQ (GB)

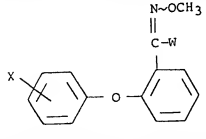
(54) **Process for producing methoxyiminoacetamide compounds and intermediates.**

(57) A compound of the formula [I] :



[I]

wherein X is hydrogen, lower alkyl, lower alkoxy or halogen ; ∿ is any configuration of E-isomer, Z-isomer or a mixture thereof is produced by reacting a compound of the formula [II]



[II]

wherein X and ∿ are as defined above ; W is -CN or -COOR ; and R is a lower alkyl, with methylamine in the presence of methanol. The compound [I] is useful for an agricultural fungicide. An intermediate used for producing the compound [I] is also disclosed.

EP 0 468 775 A1

Cited in WO 96/17825
P1 A2

(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 398 692**
A2

(12) **EUROPEAN PATENT APPLICATION**

(21) Application number: **90305303.1**

(22) Date of filing: **16.05.90**

(51) Int. Cl.[5]: **C07C 251/40, A01N 37/50, C07C 323/57, C07C 317/44, C07D 239/34, C07C 323/63, C07F 7/10, C07D 213/643, C07D 213/64, C07D 309/12, C07D 277/68**

(30) Priority: **17.05.89 JP 124059/89**
29.12.89 JP 341175/89

(43) Date of publication of application:
22.11.90 Bulletin 90/47

(84) Designated Contracting States:
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

(71) Applicant: **SHIONOGI SEIYAKU KABUSHIKI KAISHA trading under the name of SHIONOGI & CO. LTD.**
1-8, Doshomachi 3-chome Chuo-ku
Osaka 541(JP)

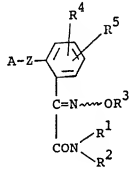
(72) Inventor: **Hayase, Yoshio**
14-177, Mizuhodai
Kameyama-shi, Mie-ken(JP)
Inventor: **Kataoka, Takahiro**
602 S. Brentwood
7, Clayton, MO 63105(US)

Inventor: **Takenaka, Hideyuki**
2496, Aburahi, Koka-cho
Koga-gun, Shigaken(JP)
Inventor: **Ichinari, Mitsuhiro**
833-69, Oharanaka, Oaza, Koka-cho
Koga-gun, Shiga-ken(JP)
Inventor: **Masuko, Michio**
614-18, Oaza, Minakuchi, Minakuchi-cho
Koga-gun, Shiga-ken(JP)
Inventor: **Takahashi, Toshio**
9-21-306, Kumano-cho
Nishinomiya-shi, Hyogo-ken(JP)
Inventor: **Tanimoto, Norihiko**
4-36, Chuo, Kousei-cho
Koga-gun, Shiga-ken(JP)

(74) Representative: **Hardisty, David Robert et al**
BOULT, WADE & TENNANT 27 Furnival Street
London EC4A IPQ(GB)

(54) **Alkoxyiminoacetamide derivatives and their use as fungicides.**

(57) A fungicidal composition for agricultural use, which comprises a compound of the formula:



(I)

EP 0 398 692 A2

(19) BUNDESREPUBLIK DEUTSCHLAND

DEUTSCHES PATENTAMT

(12) **Offenlegungsschrift**

(10) **DE 39 38 054 A1**

(21) Aktenzeichen: P 39 38 054.8
(22) Anmeldetag: 16. 11. 89
(43) Offenlegungstag: 23. 5. 91

(51) Int. Cl.[5]:
C 07 C 327/22
C 07 D 227/06
C 07 D 227/04
C 07 D 247/00
C 07 D 249/02
C 07 D 263/00
C 07 D 257/04
C 07 D 277/00
C 07 D 285/02
A 01 N 37/50
A 01 N 43/40
A 01 N 43/54

DE 39 38 054 A1

(71) Anmelder:
BASF AG, 6700 Ludwigshafen, DE

(72) Erfinder:
Wingert, Horst, Dr.; Sauter, Hubert, Dr., 6800 Mannheim, DE; Brand, Siegbert, Dr., 6940 Weinheim, DE; Wenderoth, Bernd, Dr., 6840 Lampertheim, DE; Lorenz, Gisela, Dr., 6730 Neustadt, DE; Ammermann, Eberhard, Dr., 6700 Ludwigshafen, DE

(54) Thiolcarbonsäureester

Thiolcarbonsäureester der allgemeinen Formel I,

I

(X Sauerstoff, Schwefel, Oxymethylen, Methylenoxy, Thiomethylen, Methylenthio, Ethylen, Ethenylen oder Ethinylen, R C_1-C_8-Alkyl, ein-, zwei- oder dreikerniges Aryl oder Heteroaryl, wobei Aryl und Heteroaryl folgende Reste R^1 tragen können:
R^1 Halogen, Cyano, Nitro, C_1-C_8-Alkyl, C_3-C_8-Cycloalkyl, C_1-C_8-Alkoxy, Trifluormethyl, ein- oder zweikerniges Aryloxy oder ein-, zwei- oder dreikerniges Aryl, wobei Aryloxy und Aryl ihrerseits durch die genannten Reste R^1 substituiert sein können.)
ihre Herstellung und die Thiolcarbonsäureester enthaltende fungizide Mittel sowie ein entsprechendes Verfahren zur Bekämpfung von Schadpilzen.

DE 39 38 054 A1

cited in WO 96/17825
p24 ¶ 5

(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Veröffentlichungsnummer: **0 432 503 A1**

(12) **EUROPÄISCHE PATENTANMELDUNG**

(21) Anmeldenummer: **90121826.3**

(22) Anmeldetag: **14.11.90**

(51) Int. Cl.5 **C07C 327/22**, C07C 327 36, A01N 37/44

(30) Priorität: **16.11.89 DE 3938054**
13.09.90 DE 4029092

(43) Veröffentlichungstag der Anmeldung:
19.06.91 Patentblatt 91/25

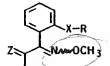
(84) Benannte Vertragsstaaten:
AT BE CH DE DK ES FR GB GR IT LI NL SE

(71) Anmelder: **BASF Aktiengesellschaft**
Carl-Bosch-Strasse 38
W-6700 Ludwigshafen(DE)

(72) Erfinder: **Wingert, Horst, Dr.**
D 3,4
W-6800 Mannheim 1(DE)
Erfinder: **Sauter, Hubert, Dr.**
Neckarpromenade 20
W-6800 Mannheim 1(DE)
Erfinder: **Brand, Siegbert, Dr.**
Eyersheimer Strasse 42
W-6701 Birkenheide(DE)
Erfinder: **Wenderoth, Bernd, Dr.**
Schwalbenstrasse 26
W-6840 Lampertheim(DE)
Erfinder: **Lorenz, Gisela, Dr.**
Erlenweg 13
W-6730 Neustadt(DE)
Erfinder: **Ammermann, Eberhard, Dr.**
Sachsenstrasse 3
W-6700 Ludwigshafen(DE)

(54) **Thiolcarbonsäureester und diese enthaltende Fungizide.**

(57) Thiolcarbonsäureester der allgemeinen Formel I,



I

in der
X Sauerstoff, Schwefel, Oxymethylen, Methylenoxy, Thiomethylen, Methylenthio, Ethylen, Ethenylen oder Ethinylen,
Z, Y Schwefel oder Sauerstoff, wobei Z und Y nicht beide gleichzeitig Sauerstoff bedeuten,
R Alkyl, ein-, zwei- oder dreikerniges Aryl oder Heteroaryl, wobei Aryl und Heteroaryl substituiert sein können,
und diese Verbindungen enthaltende fundizide Mittel.

EP 0 432 503 A1

Cited in WO 96/17825
p 24 A 5

(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Veröffentlichungsnummer: **0 493 711 A1**

(12) **EUROPÄISCHE PATENTANMELDUNG**

(21) Anmeldenummer: **91121148.0**

(22) Anmeldetag: **10.12.91**

(51) Int. Cl.5: **C07C 251/48**, C07C 59/68, C07C 255/40, C07C 65/21, C07C 235/34

(30) Priorität: **31.12.90 DE 4042273**
31.12.90 DE 4042280
31.12.90 DE 4042282
31.12.90 DE 4042283
31.12.90 DE 4042271
31.12.90 DE 4042272

(43) Veröffentlichungstag der Anmeldung:
08.07.92 Patentblatt 92/28

(84) Benannte Vertragsstaaten:
AT BE CH DE DK ES FR GB GR IT LI NL SE

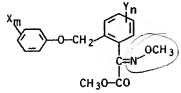
(71) Anmelder: **BASF Aktiengesellschaft**
Carl-Bosch-Strasse 38
W-6700 Ludwigshafen(DE)

(72) Erfinder: **Wingert, Horst, Dr.**
D 3,4
W-6800 Mannheim 1(DE)

Erfinder: **Wolf, Bernd, Dr.**
Hallbergstrasse 4
W-6701 Fussgoenheim(DE)
Erfinder: **Benolt, Remy, Dr.**
Londoner Ring 66
W-6700 Ludwigshafen(DE)
Erfinder: **Sauter, Hubert, Dr.**
Neckarpromenade 20
W-6800 Mannheim 1(DE)
Erfinder: **Hepp, Michael, Dr.**
Im Steg 38
W-6802 Ladenburg(DE)
Erfinder: **Grammenos, Wassilios, Dr.**
Riedsaumstrasse 11
W-6700 Ludwigshafen(DE)
Erfinder: **Kuekenhoehner, Thomas, Dr.**
Seidelstrasse 2
W-6710 Frankenthal(DE)

(54) **Verfahren zur Herstellung von E-Oximethern von Phenylglyoxylsäureestern.**

(57) Verfahren zur Herstellung von E-Oximethern von Phenylglyoxylsäureestern der allgemeinen Formel I



I

wobei die Variablen die folgende Bedeutung haben:
X,Y Substituenten, ausgewählt aus einer Gruppe bestehend aus Halogen, C_1-C_4-Alkyl, C_1-C_4-Alkoxy oder Trifluormethyl;
m eine ganze Zahl von 0 bis 4;
n eine ganze Zahl von 0 bis 3,
und wobei man
a) ein Phenol der allgemeinen Formel II

EP 0 493 711 A1

Cited in WO 96/17825 p.24 ll 5

(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 382 375 A2**

(12) # EUROPEAN PATENT APPLICATION

(21) Application number: **90300779.7**

(22) Date of filing: **25.01.90**

(51) Int. Cl.5: **C07D 239/52, C07D 417/12, C07D 413/12, C07D 401/12, A01N 43/54**

(30) Priority: **10.02.89 GB 8903019**

(43) Date of publication of application: **16.08.90 Bulletin 90/33**

(84) Designated Contracting States: **AT BE CH DE DK ES FR GB GR IT LI LU NL SE**

(71) Applicant: **IMPERIAL CHEMICAL INDUSTRIES PLC**
Imperial Chemical House, Millbank
London SW1P 3JF(GB)

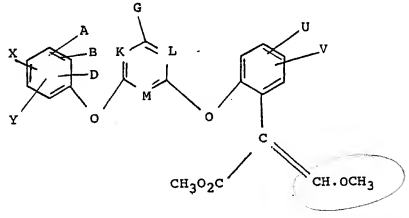
(72) Inventor: **Clough, John Martin**
7 Gypsy Lane
Marlow, Bucks(GB)

Inventor: Godfrey, Christopher Richard Ayles
159 Viking, Great Hollands
Bracknell, Berks(GB)
Inventor: Streeting, Ian Thomas
36 Valley Crescent
Wokingham, Berks(GB)
Inventor: Cheetham, Rex
10 Shaftesbury Close
Bracknell, Berks(GB)

(74) Representative: **Houghton, Malcolm John et al**
Imperial Chemical Industries PLC Legal
Department: Patents PO Box 6
Welwyn Garden City Herts, AL7 1HD(GB)

(54) **Fungicides.**

(57) Compounds having the formula (I):



in which any two of K, L and M are nitrogen and the other is CE; X and Y are independently hydrogen, halogen, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{2-4} alkenyl, C_{2-4} alkynyl, C_{2-4} alkynyloxy, phenyl, benzyloxy, cyano, isocyano, isothiocyanato, nitro, NR^1R^2, NR^1OR^2,N_3, $NHCOR^1$, $NR^1CO_2R^2$, $NHCONR^1R^2$, $N=CHNR^1R^2$, $NHSO_2R^1$, OR^1, $OCOR^1$, OSO_2R^1, SR^1, SOR^1, SO_2R^1, SO_2OR^1, $SO_2NR^1R^2$, COR^1, $CR^1=NOR^2$, $CHR^1CO_2R^2$, CO_2R^1, $CONR^1R^2$, $CSNR^1R^2$, $CN_3O_2C.C:CH.OCH3$, 1-(imidazol-1-yl)vinyl, a 5-membered heterocyclic ring containing one, two or three nitrogen heteroatoms, or a 5- or 6-membered

EP 0 382 375 A2

(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 242 081**
A1

(12) # EUROPEAN PATENT APPLICATION

(21) Application number: **87302795.7**

(22) Date of filing: **31.03.87**

(51) Int. Cl.⁴: **C 07 D 213/64**, C 07 D 213/65, C 07 D 213/85, C 07 D 213/74, C 07 D 213/75, C 07 D 215/22, C 07 D 213/80, C 07 D 213/79, C 07 D 213/70, C 07 D 213/71, C 07 D 239/34

(30) Priority: **17.04.86 GB 8609454**
23.12.86 GB 8630825

(43) Date of publication of application: **21.10.87**
Bulletin 87/43

(84) Designated Contracting States: **AT BE CH DE ES FR GB GR IT LI LU NL SE**

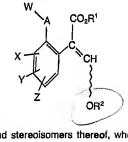
(71) Applicant: **IMPERIAL CHEMICAL INDUSTRIES PLC, Imperial Chemical House Millbank, London SW1P 3JF (GB)**

(72) Inventor: **Anthony, Vivienne Margaret, 4 The Croft, Maidenhead, Berkshire (GB)**
Inventor: Clough, John Martin, 7 Gypsy Lane, Marlow, Buckinghamshire (GB)
Inventor: DeFraine, Paul, 5 Salisbury Close, Wokingham, Berkshire (GB)
Inventor: Godfrey, Christopher Richard Ayles, 159 Viking, Groef Hollands, Bracknell, Berkshire (GB)
Inventor: Ferguson, Ian, 561 Rochdale Road, Walsden, Todmorden, Lancashire, (GB)
Inventor: Crowley, Patrick Jeff, 56 Ellis Road, Crowthorne Berkshire (GB)
Inventor: Hutchings, Michael Gordon, 11 Belvedere Court, St Ann's Road, Prestwich, Manchester, (GB)

(74) Representative: **Houghton, Malcolm John et al, Imperial Chemical Industries PLC Legal Department: Patents PO Box 6, Welwyn Garden City Herts, AL7 1HD (GB)**

(54) **Fungicides.**

(57) Compounds of formula:



and stereoisomers thereof, wherein the substituents have the meaning given in claim 1; and metal complexes thereof. The compounds are useful mainly as fungicides but also as plant growth regulators and insecticides/nematocides.

EP 0 242 081 A1

Cited in WO96/17825
p24 95

(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 178 826**
A2

(12) # EUROPEAN PATENT APPLICATION

(21) Application number: 85307108.2

(22) Date of filing: 03.10.85

(51) Int. Cl.⁴: **C 07 C 69/734**
C 07 C 103/46, A 01 N 37/10
A 01 N 37/18, C 07 C 67/343
C 07 C 69/738, C 07 D 307/54
C 07 C 79/46, C 07 C 87/50
C 07 C 107/06

A request for correction under R. 88 has been received on 140286.

(30) Priority: 19.10.84 GB 8426473
20.12.84 GB 8432265
23.05.85 GB 8513115
23.05.85 GB 8513104

(43) Date of publication of application:
23.04.86 Bulletin 86/17

(84) Designated Contracting States:
AT BE CH DE FR GB IT LI LU NL SE

(71) Applicant: IMPERIAL CHEMICAL INDUSTRIES PLC
Imperial Chemical House Millbank
London SW1P 3JF(GB)

(72) Inventor: Bushell, Micheel John
21 Suffolk Close Woosehill
Wokingham Berkshire(GB)

(72) Inventor: Beautement, Kevin
33 Sedfers Lane Winnersh
Wokingham Berkshire(GB)

(72) Inventor: Clough, John Martin
75 Littleworth Road Downley
High Wycombe Buckinghamshire(GB)

(72) Inventor: Defraine, Paul
5 Salisbury Close Wokingham
Berkshire(GB)

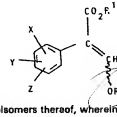
(72) Inventor: Anthony, Vivienne Margaret
7 Engeyne Gardens
Upminster Essex(GB)

(72) Inventor: Godfrey, Christopher Richard Ayles
159 Viking Great Hollands
Bracknell Berkshire(GB)

(74) Representative: Alner, Henry Giveen Hamilton et al,
Imperial Chemical Industries PLC Legal Department:
Patents P.O. Box 6 6, Bessemer Road
Welwyn Garden City Herts, AL7 1HD(GB)

(54) Fungicides.

(57) Compounds of formula:



and stereoisomers thereof, wherein X, Y and Z, which may be the same or different, are hydrogen or halogen atoms, or optionally substituted alkyl, optionally substituted alkenyl, optionally substituted aryl, optionally substituted alkynyl, haloalkyl, alkoxy, haloalkoxy, optionally substituted aryloxy, optionally substituted arylalkoxy, optionally substituted acyloxy, optionally substituted amino, optionally substituted arylazo, acylamino, nitro, nitrile, $-CO_2R^3$, $-CONR^4R^5$, $-COR^6$, $-CR^7=NR^8$, or $-N=CR^9R^{10}$ groups; or the groups X and Y, when they are in adjacent positions on the phenyl ring, may join to form a fused ring, either aromatic or aliphatic, optionally containing one or more heteroatoms; and R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9 and R^{10}, which may be the same or different, are hydrogen atoms or alkyl, cycloalkyl, alkenyl, alkynyl, optionally substituted aryl, optionally substituted aralkyl, or cycloalkylalkyl groups; and metal complexes thereof.

EP 0 178 826 A2